

# USGS Map-on-Demand Printing

## Introduction

Currently, the U.S. Geological Survey (USGS) uses conventional lithographic printing techniques to produce paper copies of most of its mapping products. This practice is not economical for those products that are in low demand. With the advent of newer technologies, high-speed, large-format printers have been coupled with innovative computer software to turn digital map data into a printed map. It is now possible to store and retrieve data from vast geospatial data bases and print a map on an as-needed basis; that is, print on demand, thereby eliminating the need to warehouse an inventory of paper maps for which there is low demand.

Using print-on-demand technology, the USGS is implementing map-on-demand (MOD) printing for certain infrequently requested maps. By providing MOD, the USGS can offer an alternative to traditional, large-volume printing and can improve its responsiveness to customers by giving them greater access to USGS scientific data in a format that otherwise might not be available.

## Products Available

The first use of MOD technology in the USGS will be confined primarily to selected thematic maps that are of scientific value but rarely requested. It is anticipated that additional USGS mapping titles will be available through print-on-demand means in the future. A list of the maps currently available can be found at <http://rmmcweb.cr.usgs.gov/public/mod/>.

## Differences between Lithographic Maps and MOD Maps

The paper and inks used in the MOD process are not as durable as those used in traditional USGS lithography. Although the inks are ultraviolet resistant, they are not water stable. These products must be protected from high humidity, wet conditions, and prolonged and consistent exposure to the sun and other radiation sources. The MOD maps can be written on with either ink or pencil with no smudging. The maps can be heat laminated with no bleeding of the colors.

## Product Delivery

Maps selected for sale using MOD printing will only be available in this format. Each map produced in this way will be evaluated periodically to determine if the demand warrants a lithographic printing. If lithographic prints are made available, the price will be adjusted to the standard price for printed maps. Because the on-demand product is printed at the request of the customer, it cannot be returned or exchanged.

## Product Costs

The USGS is required by law to recover all costs associated with printing and distribution. The price of MOD products will be established to recover the cost of labor and material required to deliver the product to the customer. Because on-demand printing produces a map when a request for one is made, the full cost to prepare this map must be recovered at

the time of sale. On-demand, unlike lithographic printing, does not have the economic value of volume printing (the more you print, the cheaper it is). The price is \$20 for each map (plus a \$5 handling charge per order). There are no discounts on MOD products. This price will be reevaluated yearly to comply with the mandate to recover costs for printing and distribution.

## Information

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For information on other USGS products and services, call 1-888-ASK-USGS, use the EARTHFAX fax-on-demand system, which is available 24 hours a day at 703-648-4888, or visit the general interest publications Web site at <http://mapping.usgs.gov/www/products/mappubs.html>.